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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/886,419	06/21/2001	Johan Scott	876.0003USU	7642

7590 02/05/2004

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EXAMINER

PESIN, BORIS M

ART UNIT	PAPER NUMBER
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2174

DATE MAILED: 02/05/2004

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/886,419

Applicant(s)

SCOTT, JOHAN

Examiner

Boris Pesin

Art Unit

2174

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-29 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). ____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____ 6) ☐ Other: ____

DETAILED ACTION

Specification

The abstract of the disclosure is objected to because:

There is a reference to a "(Figure 6)" on the last line of the abstract.

Correction is required. See MPEP § 608.01(b).

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-3, 6, 9, 14, 15, and 16, 17, 18, 20-22 are rejected under 35 U.S.C. 102(b) as being anticipated by Barry (US 5786805).

1. In regards to claim 1, Barry discloses a method for supplying a signal from said input device (i.e. "raw values received from the pointing device controller", Column 4, Line 46), providing a set of acceleration data in dependence upon said signal (i.e. "acceleration . . . [is] determined . . . [from] raw values received from the pointing device", Column 4, Line 45, determine a position of the focus on the graphical display as a function of the data, (i.e. "The pointing device driver determines the next cursor position", Column 3, Line 54) and displaying the focus at the position, (i.e. "the display cursor position is updated", Column 4, Line 52).

In regards to claim 2, Barry discloses a method for determining an acceleration of the focus as a function of the data. (i.e. "motion acceleration is determined with samples of Δh , Δv , and Δt .", Column 4, Line 2).

In regards to claim 3, Barry discloses a method for determining a velocity of the focus in dependence upon the acceleration. (i.e. "motion velocity as determined with samples of Δh , Δv , and Δt ", Column 4, Line 35).

In regards to claim 6, Barry discloses a method for updating the acceleration using some or all of the data, updating the velocity and position of the focus and displaying the focus at the updated position. (i.e. "... each pointing device sample is taken as before and the above mentioned derived quantities [acceleration and velocity] are calculated. The cursor [i.e. focus] position is not changed by the pointing device driver ... until a minimum time ... has expired", Column 5, Line 1).

In regards to claim 9, Barry discloses a method wherein the supplying of a signal comprises pressing a dual state button. (i.e. "Whenever an actuation of the pointing device hardware ... takes place (motion, force, button press/release, etc.), displacement data is accumulated and delivered to the CPU.", Column 3, Line 39).

In regards to claim 14, Barry discloses that the focus is a pointer. (Figure 8, Element 6).

In regards to claim 15, Barry discloses that the focus is a part of the page content. (Figure 8).

In regards to claim 16, Barry discloses that the focus is a window. (Figure 8, Element 5).

In regards to claim 17, Barry discloses a computer, or an electronic processing apparatus, configured to carry out the method according to claim 1.

In regards to claim 18, Barry discloses a computer, or a data processing apparatus, configured to carry out the method according to claim 1.

In regards to claim 20, Barry discloses a computer (Figure 1B) configured to carry out the method according to claim 1.

Claim 22 is in the same context as claim 1; therefore it is rejected under similar rationale.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 23-27 and 29 are rejected under 35 U.S.C. 102(e) as being anticipated by Bird et al. (US 6323884).

2. In regards to claim 23, Bird discloses a method of selecting one of a plurality of objects on a graphical display using a focus, the method comprising supplying a signal to move the focus "i.e. "pointer position listener", Column 5, Line 2), determining a direction of motion of the focus (i.e. "predict intended destination", Column 2, Line 6), determining in dependence upon said direction of motion which of one plurality of objects is the intended destination of the focus (i.e. "automatically moving the pointer to that destination", Column 2, Line 7) and highlighting the object for selection (i.e. "adds

emphasis such as a highlight colour or animation of the selected button", Column 3, Line 16).

In regards to claim 24, Bird discloses a method wherein the determining of which one of said plurality of objects is the intended destination comprises determining which of said objects is closest to the focus (i.e. "...nearest selectable GUI element to the user-indicated position will typically be identified in the prediction result", Column 9, Line 9).

In regards to claim 25, Bird discloses a method wherein the determining of which one of said plurality of objects is the intended destination comprises determining which of said objects substantially lies in the path of the direction of motion (i.e. "In an alternative embodiment which determines a region of the GUI towards which the user is moving a pointing device based on the initial position and direction", Column 9, Line 24).

In regards to claim 26, Bird discloses a method wherein the determining of which one of said plurality of objects is the intended destination further comprises defining a metrics system (i.e. formula, Column 6, Line 20).

Claim 27 is in the same context as claim 23; therefore it is rejected under similar rationale.

Claim 29 is in the same context as claim 1; therefore it is rejected under similar rational.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
 2. Ascertaining the differences between the prior art and the claims at issue.
 3. Resolving the level of ordinary skill in the pertinent art.
 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
3. Claims 4, 5, and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Barry(US 5786805) in view of Bird et al. (US 6323884).

In regards to claim 4, Barry teaches all the limitations of claim 1. Barry does not teach a method in dependence upon the direction of motion of focus whether an object is the intended destination of the focus and highlighting object for selection. Bird teaches a "... heuristic to predict the intended destination of a user-controlled mouse pointer movement and then automatically moving the pointer to that destination."(Column 2, Line 6). He further teaches that his invention "adds emphasis such as a highlight colour or animation of the selected button"(Column 3, Line 16). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Barry with the teachings in Bird and include a predicting where the pointer's

destination is, and then highlighting that object with the motivation to provide for easier selection of items within a GUI environment.

In regards to claim 5, Barry defines a metric system. (Figure 7B, Element BB)

In regards to claim 28, Barry teaches, as per claim 1, a method of selecting one of a plurality of objects on a graphical display using a focus, the method comprising: supplying a signal from an input device; providing a set of acceleration data in dependence upon said signal; determining a position of the focus on the graphical display as a function of said data, displaying the focus at said position. Barry does not teach a method for determining in dependence upon the motion of said focus which of one of said plurality of objects is the intended destination of said focus and highlighting said object for selection. Bird teaches "... heuristic to predict the intended destination of a user-controlled mouse pointer movement and then automatically moving the pointer to that destination." (Column 2, Line 6). He further teaches that his invention "adds emphasis such as a highlight colour or animation of the selected button" (Column 3, Line 16). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Barry with the teachings in Bird and include a predicting where the pointer's destination is, and then highlighting that object with the motivation to provide for easier selection of items within a GUI environment.

Claims 7 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Barry (US 5786805) in view of Gordon et al (US 6281882).

4. In regards to claim 7, Barry teaches all the limitations of claim 1. Barry does not teach the method of determining whether the velocity of the focus exceeds a predefined minimum. Gordon teaches that in his invention it is possible to figure out when the “velocity threshold is exceeded” (Column 7, Line 39). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Barry with the teaching of Gordon to include a method for figuring out when the velocity of the mouse movement exceeded the threshold with the motivation to provide for better performance of the mouse (Gordon, Column 2, Line 10).

In regards to claim 8, Gordon teaches a method for limiting the velocity of the focus if it exceeds the predefined maximum. “Once the velocity threshold is exceeded the motion indicating signals that would otherwise be associated with that movement are suppressed until such time as the velocity drops below a suitable level.”(Column 7, Line 39).

Claims 10 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Barry (US 5786805) in view of Yamada (US 5874941).

5. In regards to claim 10, Barry teaches all the limitations of claim 1. Barry does not teach the method of adding a first set of acceleration data to a second set of acceleration data. Yamada teaches a method for “adding the first and second cursor moving values [acceleration] to first and second cursor values corresponding to the position of the cursor displayed at present.”(Column 3, Line 12). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Barry with

the teachings of Yamada to include a way to add sets of acceleration data together with the motivation to provide for efficient movement in response to a user movement of the mouse.

In regards to claim 11, Yamada teaches “the acceleration signal is controlled to be zero [i.e. predefined] when the pointer is stopped” (Column 8, Line 52).

In regards to claim 12, Barry and Yamada teach all the limitations of claim 10. They do not teach a method where determining the velocity comprises adding a first member of the acceleration data to a previously determined velocity. Official notice is given that velocity as a function of time is well known in the art as:

$$v = v_o + a t$$

where v_o is the initial velocity (at $t = 0$), v is the velocity of the object at time t and a is the acceleration. It would have been obvious to one of ordinary skill in the art at the time of the invention to use the function in order to calculate the velocity with the motivation to provide for efficient movement in response to a user movement of the mouse.

In regards to claim 13, Yamada teaches “the acceleration signal is controlled to be zero [i.e. predefined] when the pointer is stopped” (Column 8, Line 52).

Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Barry (US 5786805) in view of Sturgeon et al. (US 6202212).

Claim 17 is in the same context as claim 1, except that it specifies an electronic apparatus. Barry teaches that you can perform the method of claim 1 on a computer.

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Sturgeon teaches "the advent of high performance audio and graphics sub-system has turned the personal computer into a multimedia device capable of saturating the user's audio-visual senses. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Barry with the teaching of Sturgeon to include the computer as a multimedia home product with the motivation to provide for a stimulating user environment.

Conclusion

6. The prior art made of record and is considered pertinent to applicant's disclosure.

US005745738A	Ricard
US005598187A	Ide et al.
US006281882B1	Gordon et al.
US006323884B1	Bird et al.
US005870079A	Hennessy
US005495566A	Kwaitinetz
US005786805A	Barry
US005874941A	Yamada
US006202212B1	Sturgeon et al.


7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Boris Pesin whose telephone number is (703) 305-8774.

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The examiner can normally be reached on Monday-Friday except for every other Friday..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kristine Kincaid can be reached on (703) 308-0640. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.



STEVEN COX
PRIMARY EXAMINER